

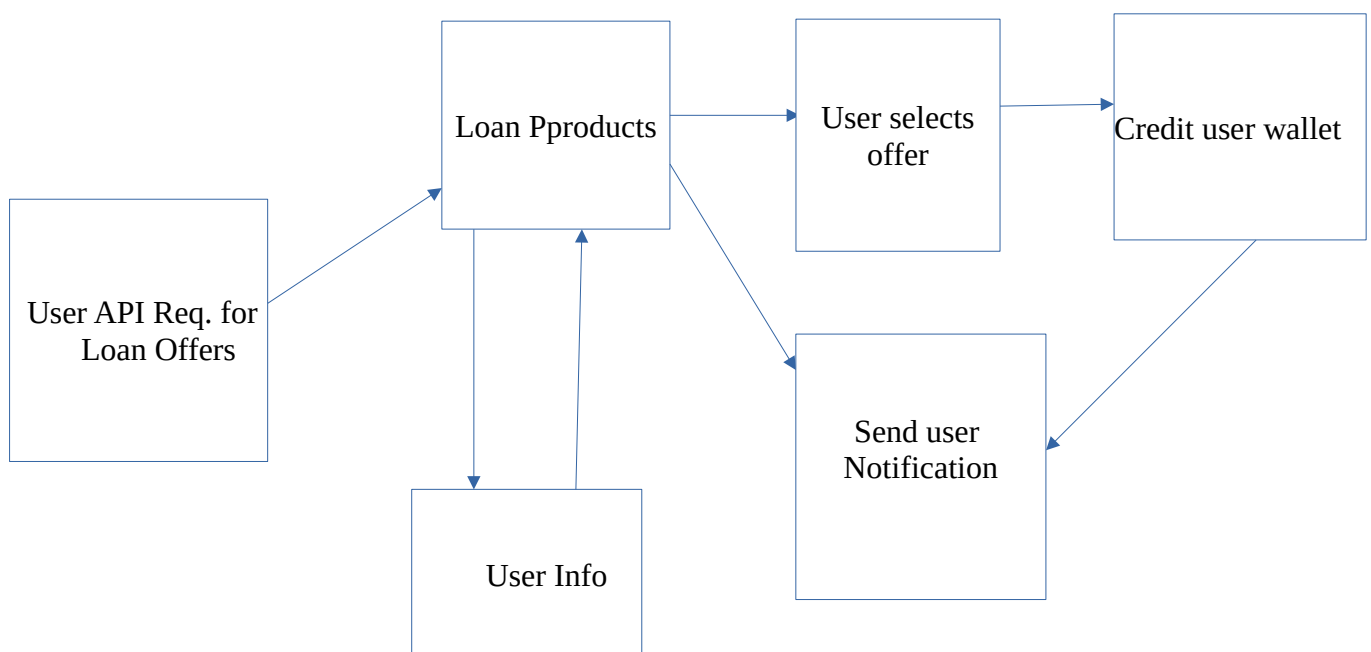
# IMS Ventures Test

## Test Lending Micro-service Design

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### Lending Design Flow

- User requests a loan
- Based on the user loan limit, the micro-service can issue one or both loan products available for offer
- User is allowed to select a loan offer from the list
- If the user does not qualify for a loan offer, the micro-service sends a notification to the user. Otherwise loan is credited to his/her wallet



To ensure the flow works as intended, the user information entity defines username and max limit for the loan the user is allowed to borrow.

If the max user limit is below 1000, the user gets no offers and we send a notification to inform the user about it.

If the user limit is 1000 or more but less than 2500, the user get one offer - PRODUCT A.

If the user limit is 2500 or more, the user gets the two offers PRODUCT A and PRODUCT B.

In this design, we are not persisting data to a database. We are relying on test stubs to create scenarios on each request.

When the user selects a loan offer, the micro-service schedules an automatic deduction of loan amount after the due date from the user's wallet.

### **Loan Payment Design Flow**

- User is allowed to pay a loan before and after due date
- User can pay after due date
- We schedule an automatic deduction of loan amount from wallet 24 hours after the loan due date in the lending flow.

### **Assumptions**

- Users are assigned loan limits for the micro-service to present the loan offers.
- User has to pay loan offered in full based on the loan product offered.
- Micro-service does not persist data. Depends on test data stubs

## Pitfalls

- Difficult to track loan payments before and after due date because data is not persisted in a database.
- There are some loose ends for the micro-service such as, we don't have wallet data associated with the user.